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Holger Ceskutti

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EXAMINER

CHEN, QING

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,208	<b>Applicant(s)</b> CESKUTTI ET AL.	
	<b>Examiner</b> Qing Chen	<b>Art Unit</b> 2191	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-32, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20100610</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office action is in response to the amendment filed on June 14, 2010.
2. **Claims 17-32, 35, and 36** are pending.
3. **Claims 17, 18, 25, 26, and 30** have been amended.
4. **Claims 1-16, 33, and 34** have been canceled.
5. The objection to the drawings is withdrawn in view of Applicant's submission of the replacement drawing sheets.
6. The objection to the title is withdrawn in view of Applicant's amendments to the title.
7. The 35 U.S.C. § 112, second paragraph, rejections of Claims 25-28 are withdrawn in view of Applicant's amendments to the claims.
8. For clarity of the prosecution history record, Examiner notes that the original title of the invention is "REMOTE PROGRAMMING OF A PROGRAM-CONTROLLED DEVICE." However, the original title shown in the "Amendments to the Specification" (received on 06/14/2010) is "METHOD AND DEVICE FOR DETECTING WEAR IN CONTROL UNITS."
9. It is noted that Claim 26 contains proposed amendments. However, the claim still bears the "Previously Presented" status identifier.

### ***Response to Amendment***

### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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11. **Claims 17, 19, 21, 23, 25-32, 35, and 36** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 17 and 30** recite the limitation of forwarding the legitimization immediately upon receiving the legitimization. The term “immediately” is a relative term, which renders the claim indefinite. The term “immediately” is not defined by the claims nor does the specification provide a standard for ascertaining the requisite degree and one of ordinary skill in the art would not be able to reasonably determine the scope of the claimed invention. In the interest of compact prosecution, the Examiner subsequently does not give any patentable weight to this limitation for the purpose of further examination.

**Claims 19, 21, 23, 25, and 29** depend on Claim 17 and, therefore, suffer the same deficiency as Claim 17.

**Claims 31, 32, 35, and 36** depend on Claim 30 and, therefore, suffer the same deficiency as Claim 30.

**Claims 25 and 26** recite the limitation “second data.” The claims are rendered indefinite because neither the claims nor the claims’ parent claims recite any features pertaining to first data. It is unclear to the Examiner as to what second data is in relation to. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “data” for the purpose of further examination.

**Claims 27 and 28** depend on Claim 26 and, therefore, suffer the same deficiency as Claim 26.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 17, 19, 21, 23, 29-32, 35, and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **US 2002/0019877 (hereinafter “Wrede”)** in view of **US 2002/0035429 (hereinafter “Banas”)**.

As per **Claim 17**, Wrede discloses:

- remotely transmitting program data from a control station via a long-distance connection to an interface connected to the device (*see Figure 1; Paragraph [0022], “In this case, the central transmitting terminal [control station] is constructed having a transmitting and/or receiving device ZKE. The motor vehicle 2 has a communications device, i.e. transmitting and/or receiving device KE, which is able to receive the transmitted data. Communications device KE can be constructed, for example, in the form of a car radio (reception only) or a*

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*mobile telephone (bi-directional) or a special telecommunications device having a transceiver which is permanently installed in the vehicle.”);*

- buffering the program data at the interface (*see Paragraph [0023], “Communications device KE routes the transmitted program data via a data bus DB1 to a central vehicle computer ZFR [interface], in which the data is checked, recorded and buffered.”);*

- remotely transmitting a legitimization from the control station to the interface, the legitimization forming a security code associated with the device (*see Paragraph [0022], “If, for example, improved software is to be given to a control unit on the vehicle side, a corresponding data transmission is carried out from an authorized transmitting terminal of the manufacturer, which in FIG. 1, is constructed as central transmitting terminal 1.”; Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG [device] and exchanged, respectively.”; Paragraph [0027], “To avoid misuse or an improper reprogramming, it is further possible to incorporate a plurality of passwords or codings [security code] in the entire communication chain from central transmitting terminal 1 up to respective control unit SG.”); [Examiner’s Remarks: Note that an identification code for the new program is sent from the central transmitting terminal to the central vehicle computer for comparison. Further note that Wrede discloses that a plurality of passwords or codings can be incorporated in this communication chain as well.]*

- forwarding the legitimization, unbuffered, to the device immediately upon receiving the legitimization at the interface (*see Paragraph [0026], “As a further prerequisite for the*

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*reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG [device] and exchanged, respectively.”);*

[Examiner’s Remarks: Note that upon receiving the identification code for the new program from the central transmitting terminal at the central vehicle computer, the identification code for the new program is forwarded to a control unit SG directly for comparison with an identification code stored in the control unit SG. Thus, one of ordinary skill in the art would readily comprehend that the identification code for the new program is forwarded to the control unit SG without buffering.]

- checking, by the device, the legitimization for validity (*see Paragraph [0026], “Only when both identification codes have been checked by the central vehicle computer and/or the specific control unit and been established in a precisely defined manner as coinciding is the programming operation enabled.”*); and

- if the legitimization is determined to be valid, entering the program data in the device (*see Paragraph [0023], “Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange.”*).

However, Wrede does not disclose:

- the device includes a memory.

Banas discloses:

- a device includes a memory (*see Paragraph [0013], “FIG. 1 illustrates an electronic control system 10 for a vehicle 12 (FIG. 2). The system 10 generally includes a processor 12, a*

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*reprogrammable memory 14, an input interface 16, an output interface 18, and a receiver 20 having an antenna 22.”).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Banas into the teaching of Wrede to include entering the program data in a memory of the device. The modification would be obvious because one of ordinary skill in the art would be motivated to store data/instructions of the device in a memory and execute the stored data/instructions by a processor.

As per **Claim 19**, the rejection of **Claim 17** is incorporated; and Wrede further discloses:

- wherein at least one of the legitimization and the program data is wirelessly transmitted via the long-distance connection (*see Figure 1; Paragraph [0022], “In this case, the central transmitting terminal is constructed having a transmitting and/or receiving device ZKE. The motor vehicle 2 has a communications device, i.e. transmitting and/or receiving device KE, which is able to receive the transmitted data. Communications device KE can be constructed, for example, in the form of a car radio (reception only) or a mobile telephone (bi-directional) or a special telecommunications device having a transceiver which is permanently installed in the vehicle.”).*

As per **Claim 21**, the rejection of **Claim 19** is incorporated; and Wrede further discloses:

- wherein the method is repeated if a fault occurs in the wireless transmission of at least one of the legitimization and the program data (*see Paragraph [0036], “However, if it is determined in step 104 that the control unit is not yet ready to receive, a jump is made back to*



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*step 103 where it is determined again whether the operating state of the motor vehicle still corresponds to the predefined operating state.”).*

As per **Claim 23**, the rejection of **Claim 21** is incorporated; and Wrede further discloses:

- wherein at least one of the program data and the legitimization is forwarded via a wired connection from the interface to the device (*see Paragraph [0023], “Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange.”).*

As per **Claim 29**, the rejection of **Claim 23** is incorporated; and Wrede further discloses:

- after entering of the program data into the memory of the device, checking whether the remote programming has been successfully completed (*see Paragraph [0029], “After reprogramming has been successfully concluded, reprogrammed control unit SG1, SG2, etc., sends an acknowledgment to the central vehicle computer, which passes on a corresponding acknowledgment to communications unit KE.”), and*
- if the remote programming has been successfully completed, resuming an operation of the device, controlled by the program data (*see Paragraph [0024], “During the reprogramming, the control unit in question enters into a precisely defined standby state which cannot be changed during the programming process. A programming is expediently carried out as quickly as possible, e.g., within a few seconds.”; Paragraph [0025], “So that no inexplicable delays arise for the driver or operator of the motor vehicle, a vehicle state is advantageously*

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*selected in which no inconvenience or disadvantages result for the driver during a programming.”; Paragraph [0029], “After reprogramming has been successfully concluded, reprogrammed control unit SG1, SG2, etc., sends an acknowledgment to the central vehicle computer, which passes on a corresponding acknowledgment to communications unit KE.”).*

As per **Claim 30**, Wrede discloses:

- an interface configured to receive program data and a legitimization (*see Figure 1; Paragraph [0023], “Communications device KE routes the transmitted program data via a data bus DB1 to a central vehicle computer ZFR [interface], in which the data is checked, recorded and buffered.”; Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG and exchanged, respectively.”*); and
- a device is configured to be remotely programmed and program-controlled, wherein the device is operatively connected to the interface, and wherein the legitimization forms a security code associated with the device (*see Paragraph [0023], “Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units [device] on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange. For example, the engine management, an ABS system, an ELB system, an electronic stability program, an electrical pneumatic suspension, a transmission-shift control or a retarder control can be control units.”; Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code*

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*for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG [device] and exchanged, respectively.”; Paragraph [0027], “To avoid misuse or an improper reprogramming, it is further possible to incorporate a plurality of passwords or codings [security code] in the entire communication chain from central transmitting terminal 1 up to respective control unit SG.”;*

[Examiner’s Remarks: Note that an identification code for the new program is sent from the central transmitting terminal to the central vehicle computer for comparison. Further note that Wrede discloses that a plurality of passwords or codings can be incorporated in this communication chain as well.]

- wherein the interface is configured to: buffer the received program data (*see Paragraph [0023], “Communications device KE routes the transmitted program data via a data bus DB1 to a central vehicle computer ZFR, in which the data is checked, recorded and buffered.”*); forward the received legitimization to the device immediately and without buffering, upon receiving the legitimization (*see Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG [device] and exchanged, respectively.”*);

[Examiner’s Remarks: Note that upon receiving the identification code for the new program from the central transmitting terminal at the central vehicle computer, the identification code for the new program is forwarded to a control unit SG directly for comparison with an identification code stored in the control unit SG. Thus, one of ordinary skill in the art would readily comprehend that the identification code for the new program is forwarded to the control unit SG

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without buffering.] and transmit the buffered program data to the device after a positive determination of validity of the legitimization by the device (*see Paragraph [0023], "Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange."; Paragraph [0026], "Only when both identification codes have been checked by the central vehicle computer and/or the specific control unit and been established in a precisely defined manner as coinciding is the programming operation enabled."*).

However, Wrede does not disclose:

- wherein the device includes a processor and a program memory.

Banas discloses:

- wherein a device includes a processor and a program memory (*see Paragraph [0013], "FIG. 1 illustrates an electronic control system 10 for a vehicle 12 (FIG. 2). The system 10 generally includes a processor 12, a reprogrammable memory 14, an input interface 16, an output interface 18, and a receiver 20 having an antenna 22."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Banas into the teaching of Wrede to include wherein the device includes a processor and a program memory. The modification would be obvious because one of ordinary skill in the art would be motivated to store data/instructions of the device in a memory and execute the stored data/instructions by a processor.

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As per **Claim 31**, the rejection of **Claim 30** is incorporated; however, Wrede does not disclose:

- wherein the program memory is one of a flash memory and an EEPROM.

Banas discloses:

- wherein a program memory is one of a flash memory and an EEPROM (*see Paragraph [0017], "Preferably, the reprogrammable memory 14 includes an EEPROM, flash non-volatile memory, and/or other memory which can be reprogrammed."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Banas into the teaching of Wrede to include wherein the program memory is one of a flash memory and an EEPROM. The modification would be obvious because one of ordinary skill in the art would be motivated to utilize a memory that can be reprogrammed (*see Banas – Paragraph [0017]*).

As per **Claim 32**, the rejection of **Claim 30** is incorporated; and Wrede further discloses:

- wherein the interface is operatively connected to a control station with the aid of a wireless long-distance connection (*see Paragraph [0022], "In this case, the central transmitting terminal [control station] is constructed having a transmitting and/or receiving device ZKE. The motor vehicle 2 has a communications device, i.e. transmitting and/or receiving device KE, which is able to receive the transmitted data. Communications device KE can be constructed, for example, in the form of a car radio (reception only) or a mobile telephone (bi-directional) or a special telecommunications device having a transceiver which is permanently installed in the vehicle."*).

As per **Claim 35**, the rejection of **Claim 32** is incorporated; and Wrede further discloses:

- wherein the device is a control unit that controls a subsidiary device (*see Figure 1; Paragraph [0022], “If, for example, improved software is to be given to a control unit on the vehicle side, a corresponding data transmission is carried out from an authorized transmitting terminal of the manufacturer, which in FIG. 1, is constructed as central transmitting terminal 1.”*).

As per **Claim 36**, the rejection of **Claim 35** is incorporated; and Wrede further discloses:

- wherein the subsidiary device is one of: a motor vehicle; a component of the motor vehicle; and an engine (*see Figure 1; Paragraph [0022], “If, for example, improved software is to be given to a control unit on the vehicle side, a corresponding data transmission is carried out from an authorized transmitting terminal of the manufacturer, which in FIG. 1, is constructed as central transmitting terminal 1.”*).

14. **Claims 18, 20, 22, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wrede** in view of **Banas** and **US 2002/0129043 (hereinafter “Nakada”)**.

As per **Claim 18**, Wrede discloses:

- remotely transmitting program data from a control station via a long-distance connection to an interface connected to the device (*see Figure 1; Paragraph [0022], “In this case, the central transmitting terminal [control station] is constructed having a transmitting*

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*and/or receiving device ZKE. The motor vehicle 2 has a communications device, i.e. transmitting and/or receiving device KE, which is able to receive the transmitted data. Communications device KE can be constructed, for example, in the form of a car radio (reception only) or a mobile telephone (bi-directional) or a special telecommunications device having a transceiver which is permanently installed in the vehicle.”);*

- buffering the program data at the interface (*see Paragraph [0023], “Communications device KE routes the transmitted program data via a data bus DB1 to a central vehicle computer ZFR [interface], in which the data is checked, recorded and buffered.”);*

- remotely transmitting a legitimization from the control station to the interface (*see Paragraph [0022], “If, for example, improved software is to be given to a control unit on the vehicle side, a corresponding data transmission is carried out from an authorized transmitting terminal of the manufacturer, which in FIG. 1, is constructed as central transmitting terminal 1.”; Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG and exchanged, respectively.”);*

- buffering the legitimization at the interface by storing the legitimization together with the program data (*see Paragraph [0015], “According to a further example embodiment of the method of the present invention, the buffer storage is operatively connected to a central vehicle computer, or is constructed as part of this central vehicle computer.”; Paragraph [0016], “Such a central vehicle computer is effectively able to check, record and temporarily store the*

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*transmitted data. The central vehicle computer can also have the ability to document the reprogramming, e.g., with identification codes, or to acknowledge to the provider side.”);*

- forwarding the legitimization to the device *(see Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG [device] and exchanged, respectively.”);*

- checking, by the device, the legitimization for validity *(see Paragraph [0026], “Only when both identification codes have been checked by the central vehicle computer and/or the specific control unit and been established in a precisely defined manner as coinciding is the programming operation enabled.”); and*

- if the legitimization is determined to be valid, entering the program data in the device *(see Paragraph [0023], “Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange.”).*

However, Wrede does not disclose:

- assigning a validity period to the legitimization;
- wherein the checking includes checking of the validity period of the legitimization;

and

- the device includes a memory.

Nakada discloses:



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- assigning a validity period to a legitimization (*see Paragraph [0078], “FIG. 11 shows an example of a construction in which validity period information 12 regarding the program is added to the program management information 5 in order to make the program for which the validity period has expired not selected.”*); and

- wherein checking includes checking of the validity period of the legitimization (*see Paragraph [0080], “After the central processing unit (CPU) 1a loads the program selected by the selection means 2, the central processing unit (CPU) 1a reads the content of each program in the program management information 5 (111) and compares the date and time at that point with the validity period information 12 (112).”*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nakada into the teaching of Wrede to include assigning a validity period to the legitimization; and wherein the checking includes checking of the validity period of the legitimization. The modification would be obvious because one of ordinary skill in the art would be motivated to provide a security mechanism in which the program data does not install in the case where the validity period of the program data has expired (*see Nakada – Paragraph [0076]*).

Banas discloses:

- a device includes a memory (*see Paragraph [0013], “FIG. 1 illustrates an electronic control system 10 for a vehicle 12 (FIG. 2). The system 10 generally includes a processor 12, a reprogrammable memory 14, an input interface 16, an output interface 18, and a receiver 20 having an antenna 22.”*).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Banas into the teaching of Wrede to include entering the program data in a memory of the device. The modification would be obvious because one of ordinary skill in the art would be motivated to store data/instructions of the device in a memory and execute the stored data/instructions by a processor.

As per **Claim 20**, the rejection of **Claim 18** is incorporated; and Wrede further discloses:

- wherein at least one of the legitimization and the program data is wirelessly transmitted via the long-distance connection (*see Figure 1; Paragraph [0022], "In this case, the central transmitting terminal is constructed having a transmitting and/or receiving device ZKE. The motor vehicle 2 has a communications device, i.e. transmitting and/or receiving device KE, which is able to receive the transmitted data. Communications device KE can be constructed, for example, in the form of a car radio (reception only) or a mobile telephone (bi-directional) or a special telecommunications device having a transceiver which is permanently installed in the vehicle."*).

As per **Claim 22**, the rejection of **Claim 20** is incorporated; and Wrede further discloses:

- wherein the method is repeated if a fault occurs in the wireless transmission of at least one of the legitimization and the program data (*see Paragraph [0036], "However, if it is determined in step 104 that the control unit is not yet ready to receive, a jump is made back to step 103 where it is determined again whether the operating state of the motor vehicle still corresponds to the predefined operating state."*).

As per **Claim 24**, the rejection of **Claim 22** is incorporated; and Wrede further discloses:

- wherein at least one of the program data and the legitimization is forwarded via a wired connection from the interface to the device (*see Paragraph [0023], "Central vehicle computer ZFR is connected via a second bi-directional data bus DB2 to the peripheral control units on the user side actually to be programmed, i.e. destination control units SG1, SG2, etc., for the data or program exchange."*).

15. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wrede** in view of **Banas** as applied to Claim 23 above, and further in view of **US 2004/0054444 (hereinafter "Abeska")**.

As per **Claim 25**, the rejection of **Claim 23** is incorporated; however, Wrede and Banas do not disclose:

- prior to the remote transmission of the program data to the interface, reading data from the memory of the device and transmitting the data to the control station.

Abeska discloses:

- prior to a remote transmission of program data to an interface, reading data from a memory of a device and transmitting the data to a control station (*see Paragraph [0050], "When a trigger for data upload occurs, the client vehicle 10, 210 may place a call to the call center to initiate a data upload request. The call center may then verify that the client vehicle 10, 210 is an active service subscriber, and request the uploading of any data that may be pending. After data*

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*is uploaded and confirmed received by the call center, the vehicle control processor 245 may clear the memory that was used to store the data, which may then be free to store new data.”).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Abeska into the teaching of Wrede to include prior to the remote transmission of the program data to the interface, reading data from the memory of the device and transmitting the data to the control station. The modification would be obvious because one of ordinary skill in the art would be motivated to collect and store vehicle information in order to provide services or determine vehicle modules that need to be reprogrammed or replaced (*see Abeska – Paragraphs [0002] to [0004]*).

16. **Claims 26-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wrede** in view of **Banas** and **Nakada** as applied to Claim 24 above, and further in view of **Abeska**.

As per **Claim 26**, the rejection of **Claim 24** is incorporated; however, Wrede, Banas, and Nakada do not disclose:

- prior to the remote transmission of the program data to the interface, reading data from the memory of the device and transmitting the data to the control station.

Abeska discloses:

- prior to a remote transmission of program data to an interface, reading data from a memory of a device and transmitting the data to a control station (*see Paragraph [0050], “When a trigger for data upload occurs, the client vehicle 10, 210 may place a call to the call center to initiate a data upload request. The call center may then verify that the client vehicle 10, 210 is an*

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*active service subscriber, and request the uploading of any data that may be pending. After data is uploaded and confirmed received by the call center, the vehicle control processor 245 may clear the memory that was used to store the data, which may then be free to store new data.”).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Abeska into the teaching of Wrede to include prior to the remote transmission of the program data to the interface, reading data from the memory of the device and transmitting the data to the control station. The modification would be obvious because one of ordinary skill in the art would be motivated to collect and store vehicle information in order to provide services or determine vehicle modules that need to be reprogrammed or replaced (*see Abeska – Paragraphs [0002] to [0004]*).

As per **Claim 27**, the rejection of **Claim 26** is incorporated; and Wrede further discloses:

- wherein the second data are buffered at the interface prior to being transmitted to the control station (*see Paragraph [0023], “Communications device KE routes the transmitted program data via a data bus DB1 to a central vehicle computer ZFR, in which the data is checked, recorded and buffered.”).*

As per **Claim 28**, the rejection of **Claim 26** is incorporated; however, Wrede, Banas, and Nakada do not disclose:

- wherein the control station arranges the program data on the basis of the second data.

Abeska discloses:

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- wherein a control station arranges program data on the basis of second data (*see Paragraph [0033], “This VUI access may allow subscribers in their vehicles equipped in accordance with the present invention to access a variety of services. For example, subscribers 210 may request route information or travel information or may provide information about their route, using voice commands in a conversational manner. Furthermore, the subscriber may have the ability to interrupt or suspend the session if required. In one embodiment of the invention, connections are made to the service management application 240 through the public telephone system.”; Paragraph [0039], “In one embodiment of the invention, the services are provided by any suitable weather reporting service. Weather services 248 may be used to receive and store regional and local weather information for playback to interested subscribers 210. Furthermore, the weather content can be delivered based on the vehicle location by coordinating the weather zone with the vehicle GPS location. The weather service 248 and/or content feed may be co-located with the service management system 240.”*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Abeska into the teaching of Wrede to include wherein the control station arranges the program data on the basis of the second data. The modification would be obvious because one of ordinary skill in the art would be motivated to provide a variety of services to a vehicle based on the vehicle's data/information.

### ***Response to Arguments***

17. Applicant's arguments filed on June 14, 2010 have been fully considered, but they are not persuasive.

***In the Remarks, Applicant argues:***

a) The Examiner contends that the identification code in paragraph [0026] of Wrede constitutes a legitimization code. As an initial matter, Wrede does not forward the identification code to a device before determining the validity of the code. According to claim 17, the validity checking is performed at the device, which can only do so after the legitimization is forwarded by the interface. In contrast, Wrede uses a central computer ZFR, which operates as both a buffer and a check on the identification code. The device being programmed, i.e., a control unit SG, does not receive the identification code until after the code is checked. Accordingly, Wrede does not teach or suggest checking the validity of a legitimization after it is forwarded to a device being programmed.

***Examiner's response:***

a) Examiner disagrees. With respect to the Applicant's assertion that Wrede does not teach or suggest checking the validity of a legitimization after it is forwarded to a device being programmed, the Examiner respectfully submits that Wrede clearly discloses checking the validity of a legitimization after it is forwarded to a device being programmed (*see Paragraph [0026], "As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG and exchanged, respectively. Only when both identification codes have been checked by the central vehicle computer and/or the specific control unit and been established in a precisely defined*

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*manner as coinciding is the programming operation enabled.*”). Note that an identification code for the new program is sent from the central transmitting terminal to the central vehicle computer for comparison with an identification code stored in a control unit SG. Then, the identification codes are checked by the control unit SG in order to determine the validity of the identification code for the new program.

Therefore, for at least the reason set forth above, the rejection made under 35 U.S.C. § 103(a) with respect to Claim 17 is proper and therefore, maintained.

***In the Remarks, Applicant argues:***

b) In addition, Wrede does not refer to the immediate transmission of a legitimization code and there is nothing to suggest that the identification code is immediately transmitted. The only information provided about the transmission of the identification code is that it is somehow sent to the central vehicle computer. Therefore, Wrede does not teach or suggest forwarding the legitimization, unbuffered, to the device immediately upon receiving the legitimization at the interface.

***Examiner's response:***

b) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, without acquiescing to the Applicant's assertion that Wrede does not teach or suggest forwarding the legitimization, unbuffered, to the device immediately upon receiving the legitimization at the interface, the Examiner first submits that, as pointed out in the 35 U.S.C. §



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112, second paragraph, rejections of Claims 17 and 30 hereinabove regarding the relative term “immediately” which renders the claims indefinite, the term “immediately” is not defined by the claims nor does the specification provide a standard for ascertaining the requisite degree and one of ordinary skill in the art would not be able to reasonably determine the scope of the claimed invention. In addition, since the Applicant already acknowledges that Wrede discloses the transmission of the identification code to the central vehicle computer, those of ordinary skill in the art would readily recognize that the identification code is transmitted to the central vehicle computer upon receiving the identification code.

Second, with respect to the Applicant’s assertion that Wrede does not teach or suggest forwarding the legitimization, unbuffered, to the device immediately upon receiving the legitimization at the interface, the Examiner respectfully submits that Wrede clearly discloses “forwarding the legitimization, unbuffered, to the device immediately upon receiving the legitimization at the interface” (*see Paragraph [0026], “As a further prerequisite for the reprogramming of a control unit, it is advantageous if an identification code for the new program, which was sent to the central vehicle computer, be compared to an identification code of the original software stored in a control unit SG and exchanged, respectively.”*). Note that upon receiving the identification code for the new program from the central transmitting terminal at the central vehicle computer, the identification code for the new program is forwarded to a control unit SG directly for comparison with an identification code stored in the control unit SG. Thus, one of ordinary skill in the art would readily comprehend that the identification code for the new program is forwarded to the control unit SG without buffering.

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Therefore, for at least the reasons set forth above, the rejection made under 35 U.S.C. § 103(a) with respect to Claim 17 is proper and therefore, maintained.

***In the Remarks, Applicant argues:***

c) In addition, claim 18 has been amended to recite, in relevant parts, "buffering the legitimization at the interface by storing the legitimization together with the program data," and "assigning a validity period to the legitimization." First, Wrede does not mention buffering the identification code together with the program data. As discussed above, the only mention in Wrede of transmitting the identification code is that the code is sent to the central vehicle computer. When the identification code is sent and where it is stored are not disclosed. Therefore, Wrede does not teach or suggest buffering the legitimization at the interface by storing the legitimization together with the program data. Second, the identification code in Wrede is not assigned a validity period, after which the code is no longer considered valid; instead, the identification code is always considered valid after determining that the new code coincides with the original code. Therefore, Wrede does not teach or suggest assigning a validity period to the legitimization.

***Examiner's response:***

c) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, with respect to the Applicant's assertion that Wrede does not teach or suggest buffering the legitimization at the interface by storing the legitimization together with the

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program data, the Examiner respectfully submits that Wrede clearly discloses “buffering the legitimization at the interface by storing the legitimization together with the program data” (*see Paragraph [0015], “According to a further example embodiment of the method of the present invention, the buffer storage is operatively connected to a central vehicle computer, or is constructed as part of this central vehicle computer.”; Paragraph [0016], “Such a central vehicle computer is effectively able to check, record and temporarily store the transmitted data. The central vehicle computer can also have the ability to document the reprogramming, e.g., with identification codes, or to acknowledge to the provider side.”*).

Second, with respect to the Applicant’s assertion that Wrede does not teach or suggest assigning a validity period to the legitimization, the Examiner respectfully submits that Nakada clearly discloses “assigning a validity period to a legitimization” (*see Paragraph [0078], “FIG. 11 shows an example of a construction in which validity period information 12 regarding the program is added to the program management information 5 in order to make the program for which the validity period has expired not selected.”*). Therefore, the Applicant’s argument regarding Wrede does not teach or suggest assigning a validity period to the legitimization is, at best, moot.

Therefore, for at least the reasons set forth above, the rejection made under 35 U.S.C. § 103(a) with respect to Claim 18 is proper and therefore, maintained.

### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The

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Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM.

The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Q. C./

Examiner, Art Unit 2191

/Anna Deng/

Primary Examiner, Art Unit 2191